USER'S MANUAL

CCTV Tester - MC3.5H-BP-PTZ

- Thank you for purchasing the CCTV security tester. Please read the manual before using the CCTV tester and use properly.
- For using the CCTV tester safely, please first read the「Safety Information」carefully in the manual.
- The manual should be kept well in case of reference.
- Keep the S/N label for after-sale service within warranty period. Product without S/N label will be charged for repair service.
- If there is any question or problem while using the CCTV tester, or damages occurred on the product, please contact our technical Department.

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1. Safety Information

Notice

- The tester is intended to use in compliance with the local rules of the electrical usage and avoid to apply at the places which are inapplicable for the use of electrics such as hospital, gas station etc.
- To prevent the functional decline or failure, the product should not be sprinkled or damped.
- The exposed part of the tester should not be touched by the dust and liquid.
- During transportation and use, it is highly recommended to avoid the violent collision and vibration of the tester, lest damaging components and causing failure.
- Don't leave the tester alone while charging and recharging. If the battery is found severely hot, the tester should be powered off from the electric source at once. The test should not be charged over 8 hours.

- Don't use the tester where the humidity is high. Once the tester is damp, power off immediately and move away other cables connected.
- The tester should not be use in the environment with the flammable gas.
- Do not disassembly the instrument since no component inside can be repaired by the user. If the disassembly is necessary indeed, please contact with the technician of our company.
- The instrument should not be used under the environment with strong electromagnetic interference.
- Don't touch the tester with wet hands or waterish things.
- Don't use the detergent to clean and the dry cloth is suggested to use. If the dirt is not easy to remove, the soft cloth with water or neutral detergent can be used. but the cloth should be tweaked sufficiently.

The data above is only for reference and any change of them will not be informed in advance. For more detailed technical inquiries, please feel free to call the Technical Department of our company.

Products certification:

CE FC

6. Specification

MODEL	CCTV Security Tester
Video Test	
Signal mode	NTSC/PAL (Auto adapt)
Display	3.5 inch digital TFT-LCD ,960 x 240 resolution
lights	Adapt to the dark repair work environment
Video IN/OUT	1 channel BNC Input & 1 channel Output
PTZ controller	
Communication	simplex and RS485
PTZ Protocol	Compatible with more than protocols such as PELCO-D/P, Samsung, Panasonic, , etc.
Baud Rate	150,300,600,1200,2400,4800,9600,19200bps
Video Signal Generation	
Color bar generation	Output one channel PAL/NTSC colorbar video signal for testing monitor or video cable.
UTP CABLE TEST	
UTP cable test	Test UTP cable connection status and display in the screen. Read the number of the test box.
DC12V 1A power output	
DC12V power output	Output DC12V1A power for camera
Audio input test	
Audio input test	test the pickup and other audio equipments on the front-end
RS485 data analyst	
Data Monitor	Captures and analyzes the command data from controlling device
POWER	
Power Adapter	DC5V, 1A
Battery	Built-in 3.7V Lithium polymer battery ,3000mAh
Rechargeable	After charging 6-8 hour, working time lasts8 hours
Low Consumption	Energy saving technology
General	
Working Temperature	-10℃---+50℃
Working Humidity	30%-90%
Dimension/Weight	176mmx94mmx36mm/340g

2. Introduction

The CCTV tester is developed for the On-Site installation and maintenance of video monitoring system. It can be used for displaying video, controlling PTZ, generating images, capturing data of RS485 and testing LAN cable etc. Its functions, easy operation, and portability makes it simple for the CCTV technician to install and maintain CCTV system, improving work efficiency and get the labor cost down.

2.1 Features

- 3.5"TFT-LCD, 960（H）×240（V）resolution.
- Video Level testing, video signals measured in IRE or mV
- DC12V 1A power output for camera
- Audio input testing, testing the audio signal from pickup devices
- PTZ control. Pan/tilts the P/T unit, zooms in/out the lens, adjusts the focus, aperture and sets and calls the preset position
- PTZ continuing rotate test
- Video displaying. Automatically adapts and displays the video format of NTSC/PAL. LCD Brightness is adjustable...
- Video Generating, The PAL/NTSC multi-system color bar video generator (seven-system switchable, transmit/receive seven-system colorful imagines)
- Data analyst. Captures and analyzes RS485 controlling data to help the technician to find out the problem.
- Cable testing. It is powerful in testing LAN cable, measuring the connecting status ，displaying the sequence of connection and the NO. Of the LAN cable.
- Multi-interface and Multi-baud rate. Support RS232, RS485 and RS422 interface; baud rate ranging from 150, 600 to 19200bps.
- Multi-protocol. Supports more than twenty PTZ protocols. For example, PELCO-P, PELCO-D, SAMSUNG etc.
- PTZ address scanning, search up the ID of PTZ camera.

- Lithium Ion Polymer Battery (3.7V DC3000mAh). The device employs advanced power control and protection circuit. The device is high power-efficient, energy saving and environmental protection. It can last 8 hours for normal use after charging for 6 hours.

2.2 CCTV Tester Kits

Professional design, light and portability, video display and data control are deliberately integrated, which makes the instrument so simple, practicable, and easy for use that the training is almost unnecessary for an operator to be skillful.

1). Tester host
2). Charger 5V 1.0A
3). Cable test box
4). BNC cable
5) RS485 cable
6). Power output conversion line
7). Audio Video Cable
8) Lanyard
9). Kit
10). Manual

4. DC12V 1A power output

Power the camera with DC12V(1A) power output from the tester. It is helpful for demo and testing where there is no power supply available.

Notice

a. Don't input any power into the "DC12/1A OUTPUT" port of the CCTV tester to avoid destroy.
b. Don't output this DC12V/1A power to the power input port of the CCTV tester to avoid destroy.
c. When the requirement of the camera is higher than 1A, the CCTV tester will enter protection mode. Disconnect all the connections of the CCTV tester and then connect the CCTV tester with power adaptor to resume the CCTV tester.

5. Audio input test

Test the audio input from pickup devices. Connect the tester and pickup device with the audio cable.

(**Note:** The system returns to "OFF" after shutdown, and the scan sub-menu closes automatically. Set "ON" again for next use.)

Press [SET] key to set: protocol, communication port, communication rate, make them same as the PTZ camera

Press [NEAR] or [FAR] key, the address values is constantly on the rise or decrease.

NEAR: The tester will search up the ID quickly and continuously(from 1 to 256). When the ID is searched, the PTZ camera will pan right. At this time, please press any key to stop searching up.

FAR: The tester will search up the ID quickly and continuously(from 256 to 1). When the ID is searched, the PTZ camera will pan left. At this time, please press any key to stop searching up.

WIDE: The tester will search up the ID step by step (from 1 to 256). When the ID is searched, the PTZ camera will stop panning.

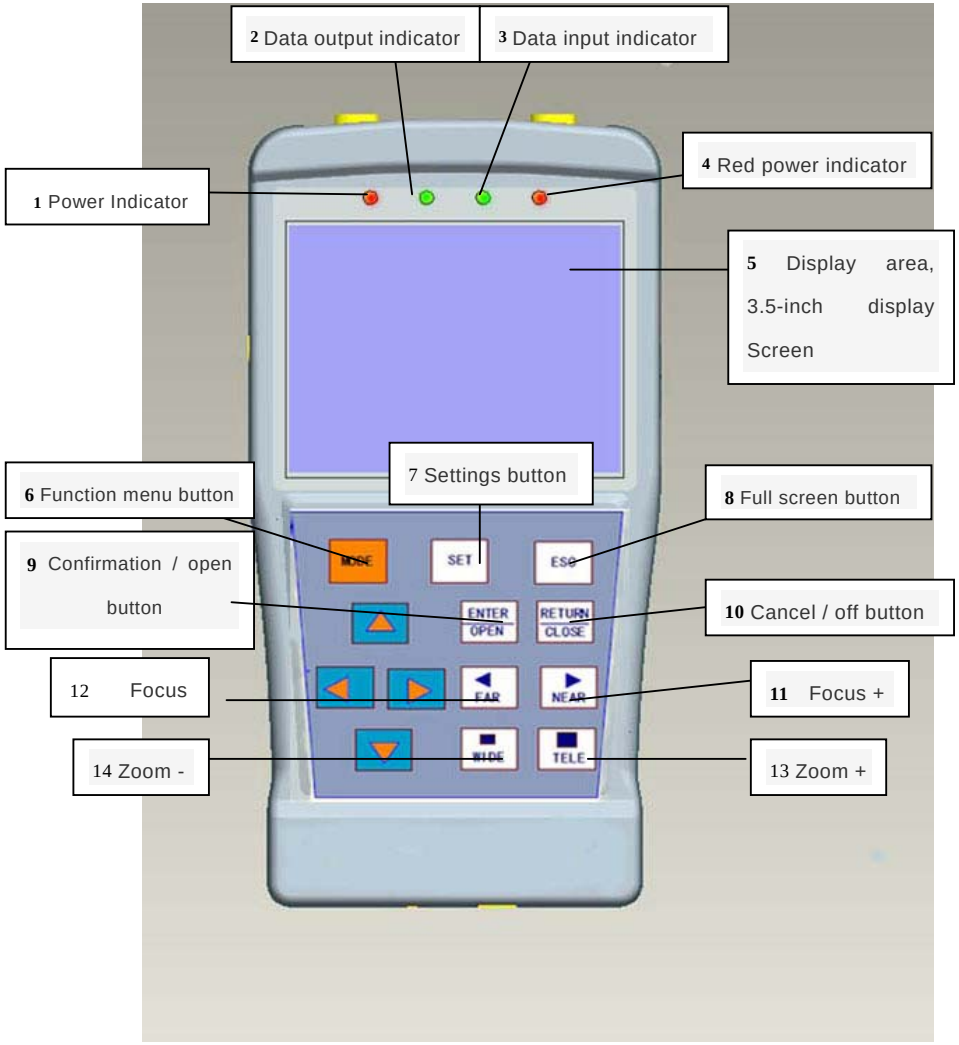
FAR: The tester will search up the ID step by step (from 256 to 1). When the ID is searched, the PTZ camera will stop panning.

Press [NEAR] button, the tester will search up the ID quickly and continuously(from 1 to 256). When the ID is searched, the PTZ camera will pan right. At this time, please press any key to stop searching up. Press [TELE] manual single-step decreasing button, the tester will search up the ID step by step (from 256 to 1). When the ID is searched, the PTZ camera will stop panning.

Press [FAR] button , the tester will search up the ID quickly and continuously(from 256 to 1). When the ID is searched, the PTZ camera will pan left. At this time, please press any key to stop searching up. Press [WIDE] manual single-step incremental button, the tester will search up the ID step by step (from 1 to 256). When the ID is searched, the PTZ camera will stop panning.

Press the direction control button to adjust Speed Dome Camera. Press [MODE] button to quit from the address-scanning function menu.

2.3 Front Panel （Name in various parts of the instrument, and features:）



1	OOWER	When powered up, the red light power indicator
2	RX	Green light flashes when data reception indicator, receive data
3	TX	Shiny green data transmission indicator light to send data
4	CHARGE	Charge indicator when charging red light. The light automatically turns off when the battery is fully
5		Display area, display the video image, battery power, and the function menu and related data
6	MODE	Menu key: it pops up the main-menu; constant-press it or press the △ or ▽ key can shift between functions
7	SET	Settings button, enter in each functional mode instrument parameter settings
8	ESC	Hidden by the PTZ controller of state power display and deleting the RS485 input data
9	ENTER OPEN	Confirm/Open : Confirm the setting of parameters; open the aperture.
10	RETURN CLOSE	Return/Close : Return or cancel while setting parameters of the menu; close the aperture
11	NEAR	Near focus: Focus the image nearby.
12	FAR	Far focus: Focus the image faraway.
13	TELE	TELE: zoom in the image

controlling system.

b. Press RETURN key to clear the screen.

3.7Tester settings

Set the parameters of the CCTV tester

Keypad tone: Open or close the beep of pressing keypad.

Language: Select language of OSD menu

Brightness: Setting the brightness of OSD menu and background.(0~6)

Address search: off / on Open or close the PTZ address search Menu.

a. Press △ or ▽ key to move the parameter we want to change.

b. Press ◁ or ▷ to change the value.

c. Press ENTER to save the change or press RETURN key to give up the change.

3.8 PTZ address scanning

Search up the ID of PTZ camera.

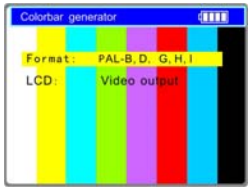
Note: Please isolate the PTZ camera with other PTZ cameras before searching up. Otherwise all the PTZ cameras in the same system will pan at the same time.

Press MODE keys to "Device setting" menu:

Press ENTER OPEN key to confirm after change "Address search:" to "on", which add address scan sub-menu. Press MODE to switch the sub-menu as illustrated:

3.4 Colorbar generator (Output video at any mode)

Output or receive seven different forms of video color bar to test monitor, video cable or other equipment.



a. Press the ▲ or ▽ key to select the parameter which we want to change the value.

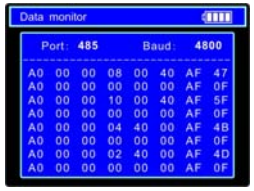
b. Press the ◁ or ▷ key to change the value.

c. Press ENTER key to save the change or press RETURN key to give up the change

3.5 Cable tester

3.6. Data monitor

Capture the command data from RS485 controlling system.



a. Connect the RS485 or RS232 interface of controlling system with the RS485 or RS232 interface of the CCTV testerPRO (In case of RS485, A to A, B to B)

b. Press SET key and then press ▲ or ▽ key to select communication port according to the system connection. Press SET key to save the change.

a. Press ▲ or ▽ key to select the baud rate according to the baud rate of controlling system and then press SET key to save the change and capture command data from

14	WIDE	WIDE: zoom out the image

2.4 Side view

15 . +12 V power output
16 cable to connect the test interface
17 an image signal input
18 outputs the image signal
19 +12 V power output indicator
20 RS485 communication terminal
21 lights

15	DC12V1A power output: output DC12V power for camera
16	UTP cable port: Please use together with UTP LAN cable tester.
17	Video input (BNC input interface): Inputs the video.
18	Video output (BNC output interface): Outputs the video.
19	Light connected to the 12V power cable
20	RS485 Interface: RS485 communication for the PTZ.
21	Adapt to the dark repair work environment
22	For different audio video input / output interface signal test
23	Shut off battery power and lights switch
24	External power supply (DC, 5V): It is highly recommended to use the equipped power adapter.

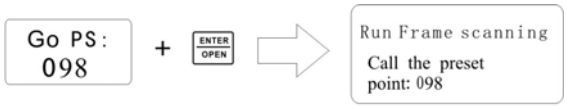
Call preset-95—Enter the main menu of the PTZ camera or stop the PATTERN recording.

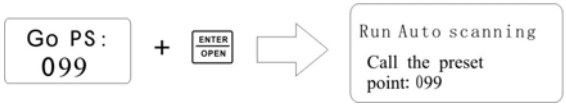
Call preset-96—Run pattern-1

Call preset-97—Run preset tour-1

Call preset-98—Run frame Scan

Call preset-99—Run Auto scan





PTZ continuing rotate test

PTZ continuing rotate test is used to test whether the "PTZ rotate" is normal. Press and hold the direction key (e.g. or). The PTZ start rotating. Press the "power" key one time, then release the direction key. PTZ will rotate continuously. Press any direction key afterwards will stop the rotating.This function is used to test whether the "PTZ rotate" is normal. The PTZ may have problem when rotates to some particular position,like not rotating smoothly or get stuck. The install worker could judge whether the PTZ has problem by observing the PTZ .

position number.

b. Press ENTER key to complete preset position calling or preset RETURN key to give up preset position calling.

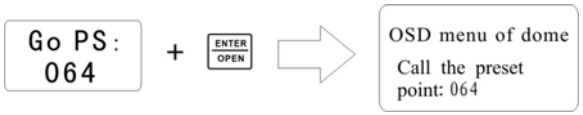
Tips: Press ▷ or ◁ key to accelerate the value changing.

The way of calling the OSD menu and preset of the PTZ camera may vary with control systems from different manufacturers. Please read the operation manual of control system manufacturer for details. The way of calling OSD provided for reference is calling preset-64.

a. Move the yellow cursor to "PTZ controller" to enter PTZ controller mode

b. Press SET key to enter PTZ controller sub-menu. Press △ or ▽ key to move the yellow cursor to "Go PS",

c. Press ◁ or ▷ key to select the preset number 64, and then press ENTER key to call OSD menu of the PTZ controller.



OSD Menu of Dome (For reference only)

MAIN MENU	MAIN MENU
1. DISPLAY SETUP	1. Display configuration
2. CAMERA SETUP	2. Set camera parameters.
3. CONTROL SETUP	3. Set PTZ controlling
4. CAMERA MASK SET	4. Set privacy mask
5. PROGRAM	5. Set auto-running functions
6. PAL CAMERA	6. PAL/NTSC Switch
7. CAM DEFAULT SET	7. Restore the default settings
8. DOME RESET	8. Reset the dome
9. EXIT	9. Exit the main menu

■ **Operate auto-running functions by calling preset position(effective for some brands of PTZ camera)**

Call preset-33—Open Auto-flip function

Call preset-34—Reset zero point of PTZ camera

Call preset-64—Enter the main menu of the PTZ camera

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3. Operation

3.1 Power on

Turn the power on / off CCTV tester. Press the MODE button, the main menu will pop up

3.2 Menu & Functions

Press MODE key continuously or press the or key to select the function (PTZ controller,, Colorbar generator, LAN cable tester, Data monitors, Device setting) and enter corresponding function setting sub-menu. Press SET key to set the parameters in function sub-menu.

Note: When the CCTV testerPRO is powered on, it will return to the function which is being operated before it is turned off

1. PTZ controller

Display the input video images. Pan/tilt the P/T unit and zoom in/ out the image. Setup the controlling parameters like protocol, communication port, baud rate, PTZ ID, pan/tilt speed; set and call preset position.